## Research Agreement between NREL and Swedish Center

Energitekniskt Centrum (ETC) in Piteå has signed a research agreement with NREL to develop a new mathematical model to describe how biomass is converted thermally to synthesis gas, which in turn can be converted to fuel or chemicals. Funding comes from the Swedish Energy Agency and DOE under the Swedish-American Science and Technology Agreement signed in 2006.

## **Swede Introduces Wooden Key Cards in Colorado**

Sustainable Cards is introducing wooden key cards in the United States. The card is formed with three thin layers of planed wood, then laminated and provided with a magnetic strip. Peo Åkesson, CEO of Sustainable Cards and Vice-Chairman of the Swedish American Chamber of Commerce in Colorado, got the idea from a carpenter in the small town of Hede in northern Sweden and decided to bring the invention across the Atlantic. Rumor has it that wooden credit cards may be next.

## City of Stockholm and Vattenfall to Buy 14,000 Electric Vehicles

In a couple of months, the City of Stockholm and Swedish energy company Vattenfall will begin one of the world's largest procurements of electric vehicles. Vattenfall and Stockholm represent more than 100 Swedish companies and municipalities that have pledged to acquire 12,000 to 14,000 electric vehicles in the next four years.

## IKEA Spreading Solar Lighting to Developing Countries, and the U.S.

For every SUNNAN solar-powered lamp sold in IKEA stores worldwide, one lamp will be given to UNICEF for distribution to children in developing countries. The lamp runs on three AA batteries charged by the sun, with an LED light using 70% less energy. IKEA has also begun its third solar installation in the U.S. with its store in Tempe, Arizona joining stores in Pittsburgh and Brooklyn in installing solar panels.

# Printable Lighting – a Swedish/U.S. Invention

Two Swedish researchers – Ludvig Edman of Umeå University and Nathaniel Robinson of Linköping University – have teamed up with Rutgers University's Manish Chhowalla to produce an energy-saving form of lighting, a flat sheet made with layers of graphite instead of metal. As a result, the flat lighting sheets can be printed using industrial inkjet printers.

## Maine Provides Opportunity to Work with EU on BioMass Residential Heating Standards

This week Maine announced that until 2012, the state will allow residential Class 3 boilers under the EU Standard EN 303.5. This two-year period should allow U.S. EPA and Sweden to develop common testing procedures for residential heating devices, a key step toward common U.S. and EU standards.

### Skanska Builds LEED-Certified Student Recreation Center at Portland State University

Yost Grube Hall Architecture and Skanska USA Building announced that Portland State University's new Academic and Student Recreation Center has been awarded LEED Gold certification. Features include: water usage reduced over 85%; rainwater from the roof captured, stored and reused on site; and daylight-controlled electric light fixtures turned off when daylight conditions are sufficient.

### Swedish Firms Increasingly See the U.S. as an Attractive Source for Biomass

New York-based energy woodchip supplier Green Energy Resources Inc. recently announced a two-year; \$50 million contract to supply high-energy woodchips for power generation in Sweden. Green Energy Resources will ship approximately \$2 million worth of woodchips each month.

SAGA makes connections, cultivates partnerships, and celebrates the ongoing story of progress toward a sustainable future. What is your story? Email us at: sagastory@gmail.com